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(54) **SYSTEMS AND METHODS FOR  
PREPARATION OF MEDICATIONS**

(56) **References Cited**

U.S. PATENT DOCUMENTS

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3,915,393	A	10/1975	Elkins	
4,003,523	A *	1/1977	Doolittle	241/169.2
4,209,136	A *	6/1980	Linden et al.	241/169.2
5,118,021	A	6/1992	Fiocchi	
5,823,451	A	10/1998	Sharpe	
5,863,001	A	1/1999	Schulze	
5,915,637	A	6/1999	Parsons	
6,637,683	B1	10/2003	Wilbur	
6,966,509	B2 *	11/2005	Janzen	241/169
7,243,826	B2	7/2007	Darst	
7,252,254	B1 *	8/2007	Engel et al.	241/168
7,347,394	B2	3/2008	Buckley	
7,637,449	B1	12/2009	Leyshon et al.	
7,735,763	B2 *	6/2010	Bell et al.	241/169.1
7,845,588	B1	12/2010	Goodick	
8,720,808	B2 *	5/2014	Young et al.	241/169.2
2005/0067452	A1	3/2005	Darst	

(Continued)

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**A61J 7/00** (2006.01)  
**B02C 19/08** (2006.01)
- (52) **U.S. Cl.**  
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- (58) **Field of Classification Search**  
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USPC ..... 241/169, DIG. 27, 169.2; 30/124  
See application file for complete search history.

FOREIGN PATENT DOCUMENTS

EP	1667629	12/2010
WO	2005030117	4/2005
WO	2007084554	7/2007

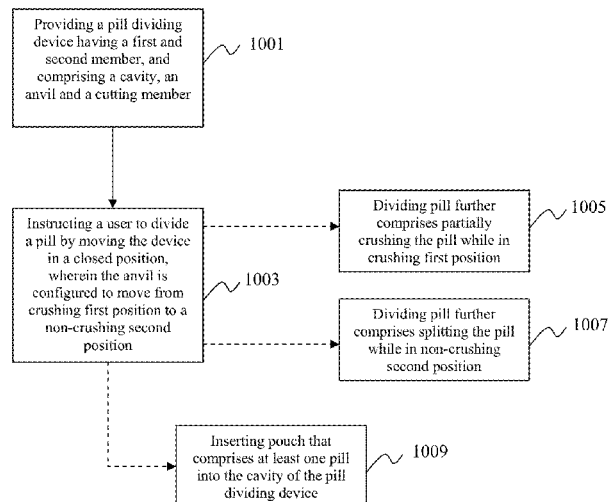
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(57) **ABSTRACT**

A pill is divided using a pill splitter and crusher device having a first member coupled to a second member. The first member includes a pill-receiving cavity and the second member comprises a blade and an anvil. In some contemplated embodiments, the anvil is configured to crush a pill placed within the cavity and the blade is configured to split the pill within the cavity. Furthermore, the anvil is coupled to the second member, such that the anvil could move from a crushing position to a non-crushing position, which allows for crushing and splitting of the pill, respectively.

**14 Claims, 7 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

2007/0164141 A1 7/2007 Engel et al.  
2007/0228053 A1 10/2007 Darst

2007/0297701 A1 12/2007 Engel et al.  
2008/0061175 A1 3/2008 Engel et al.  
2008/0078797 A1 4/2008 Frick

\* cited by examiner

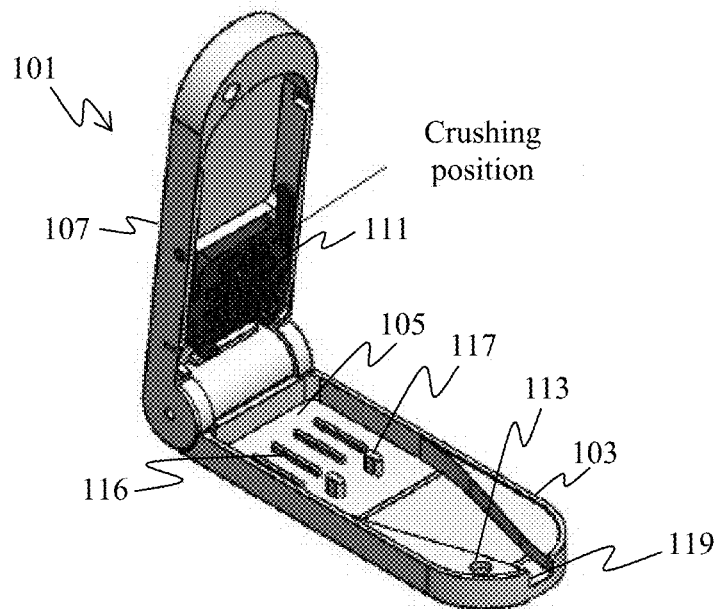


Figure 1A

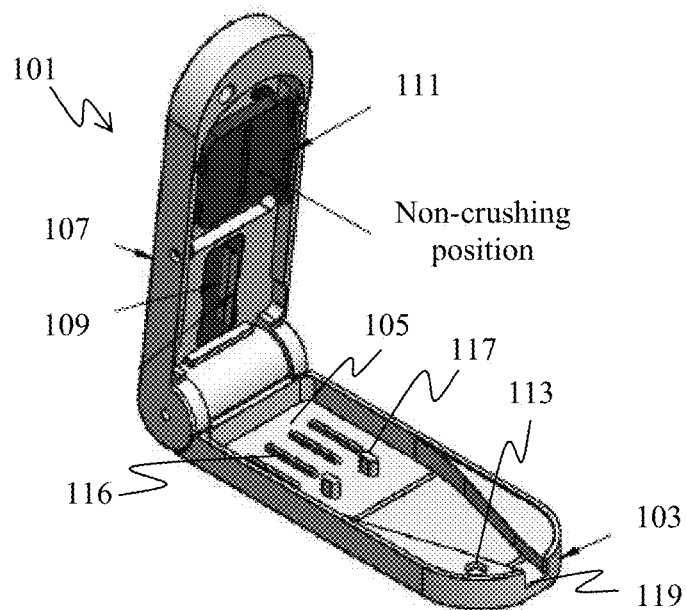


Figure 1B

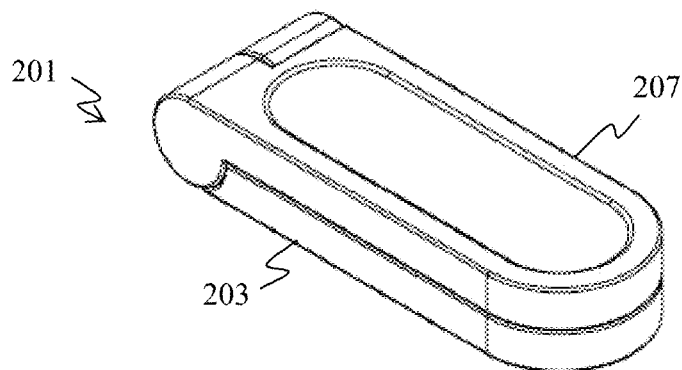


Figure 2

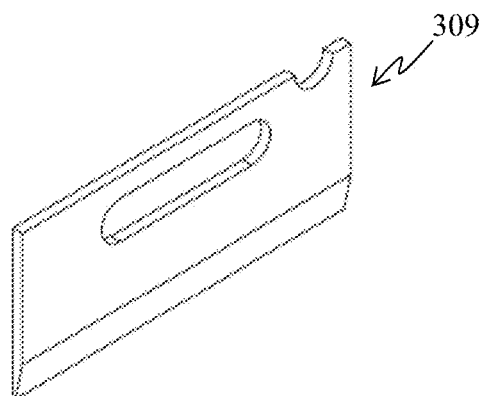


Figure 3

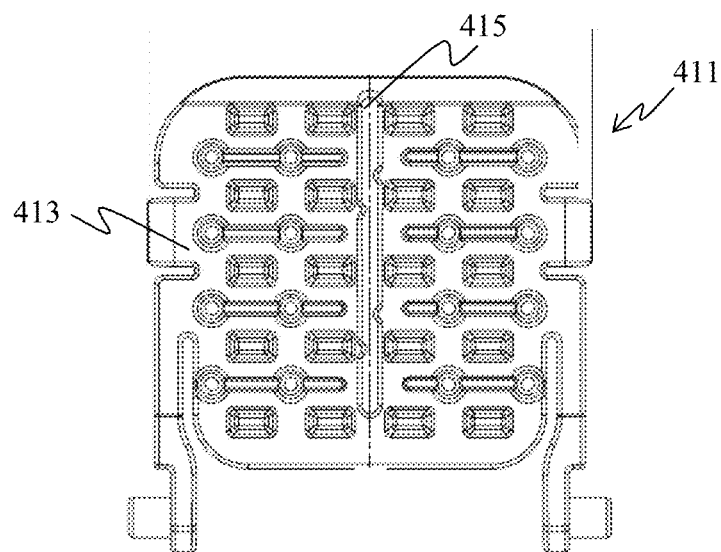


Figure 4A

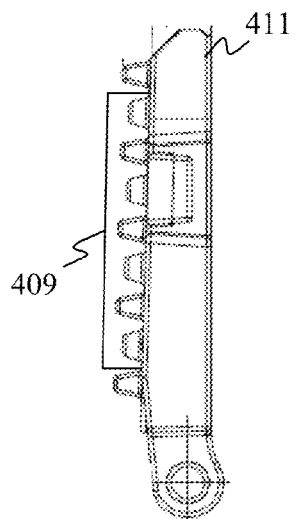


Figure 4B

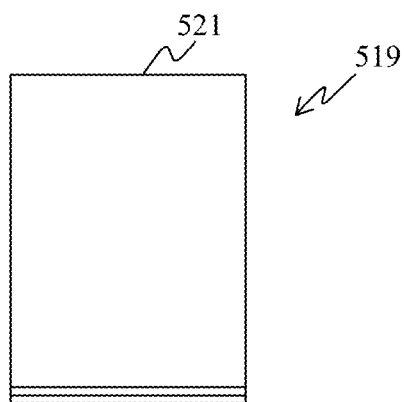


Figure 5

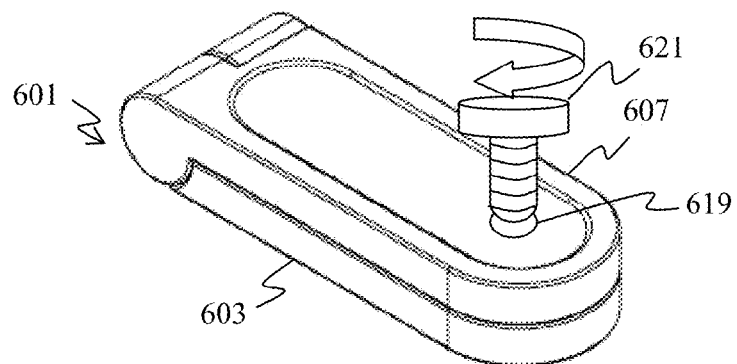


Figure 6

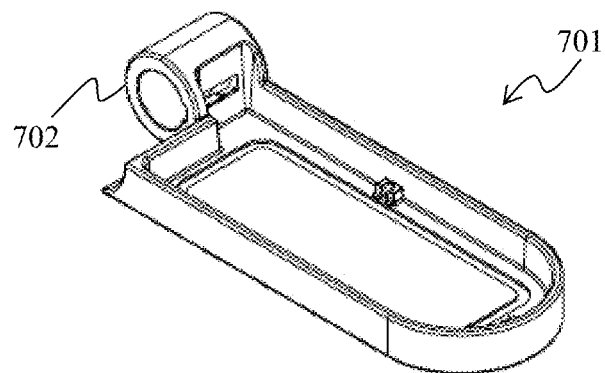


Figure 7

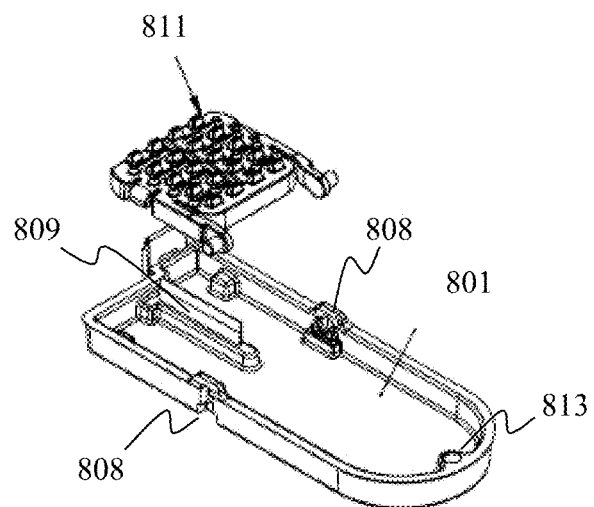


Figure 8A

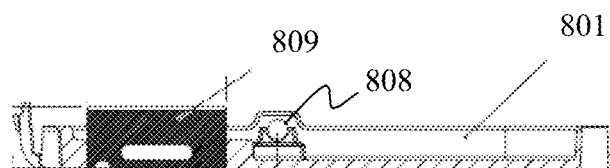


Figure 8B

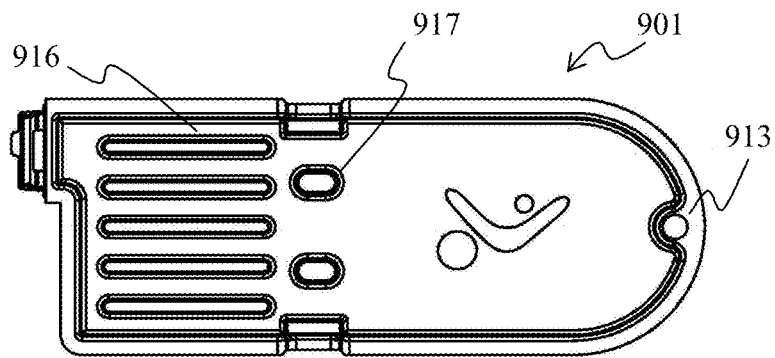


Figure 9A

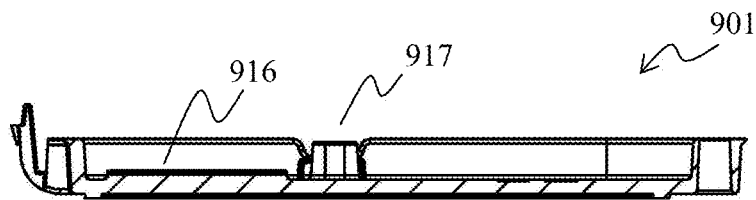


Figure 9B

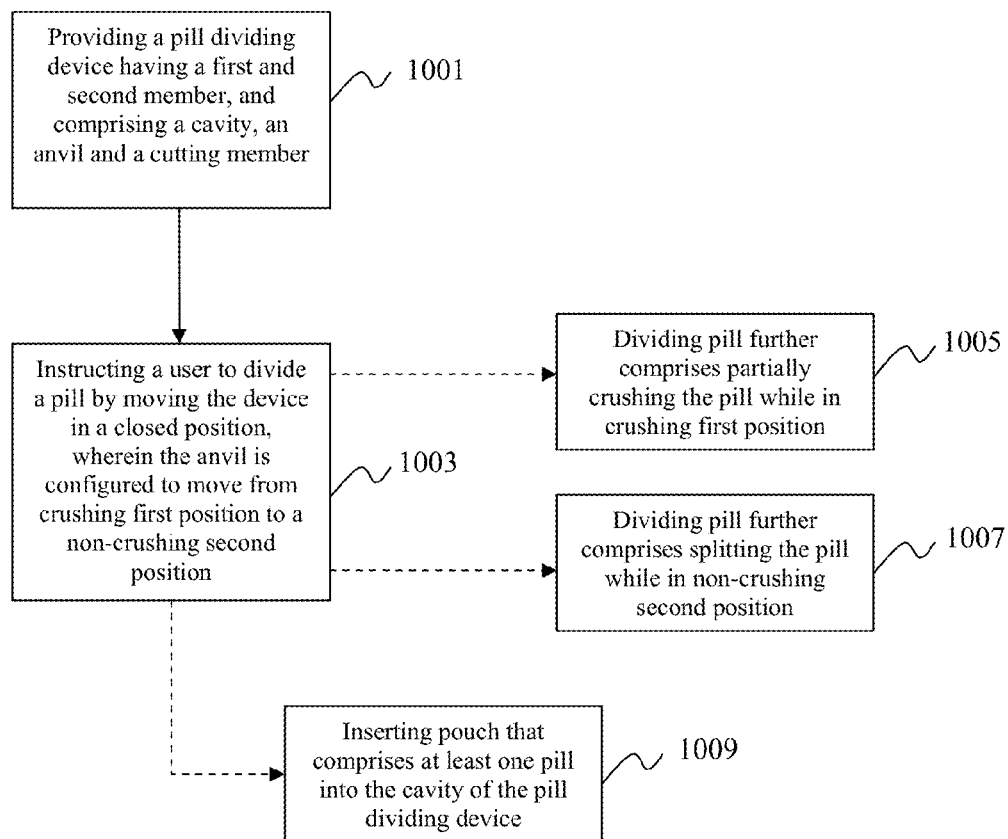


Figure 10



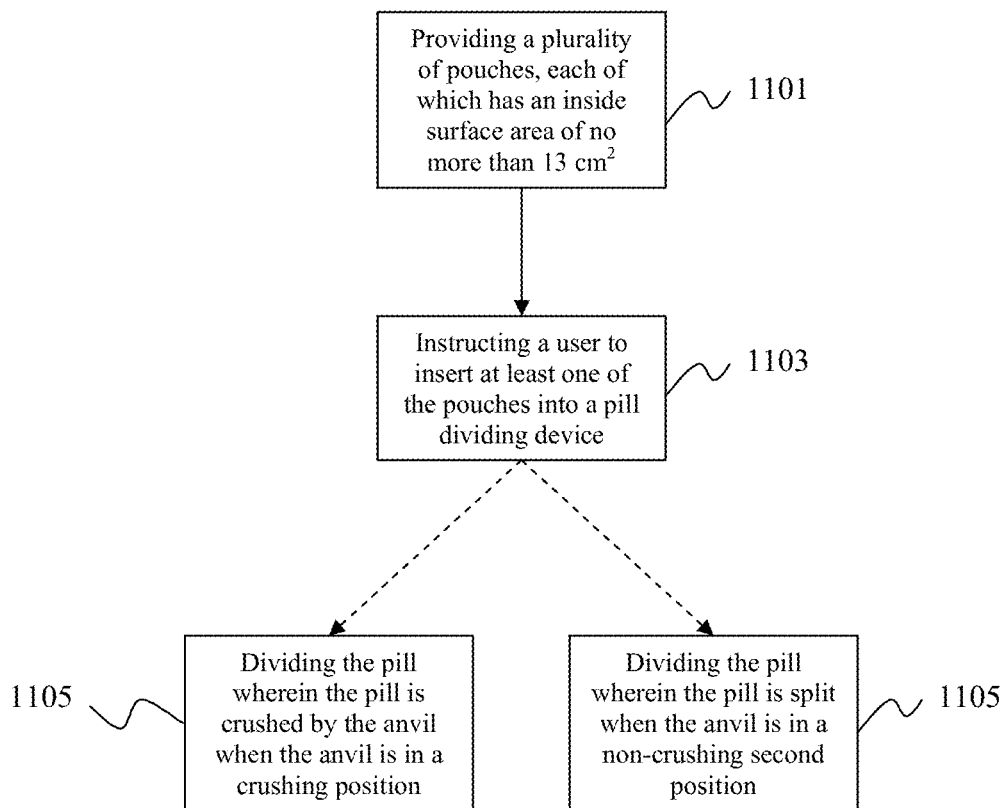


Figure 11

## SYSTEMS AND METHODS FOR PREPARATION OF MEDICATIONS

This application is a divisional of U.S. patent application Ser. No. 13/554,096 filed Feb. 20, 2012. This and all other extrinsic materials discussed herein are incorporated by reference in their entirety.

### FIELD OF THE INVENTION

The field of the invention is dividing a pill by cutting and/or slicing.

### BACKGROUND

The following background discussion includes information that may be useful in understanding the present invention. It is not an admission that any of the information provided herein is prior art or relevant to the presently claimed invention, or that any publication specifically or implicitly referenced is prior art.

Pills and tablets are often a standard form of delivery for many medications and vitamins to users. These pills and tablets can come in different shapes and sizes. For example, pills and tablets could have a round, capsule, oblong, rectangle, or heart shape. Often times, consuming the pill can be problematic due to its size and shape. In addition, it can be difficult to split a pill in half, such as to reduce a dose of a medication.

In an effort to reduce the problems with administering certain pills, various pill cutters are known in the art. For example, U.S. Pat. No. 7,243,826 to Darst discusses a pill splitter having a blade guard that retracts when the device is closed. Although the device could include a pill crusher compartment that utilizes a portion of dead space within the device, such compartment is located in a separate portion of the device, adding unnecessary complexity to the device. In addition, the device fails to allow for quick replacement of the blade or crusher.

Another version of a pill splitter is discussed in U.S. Pat. No. 5,118,021 to Fiocchi. The Fiocchi pill splitter is capable of pill splitting and pulverizing. A pill is split by a hinged top with a blade when the cap is moved to a closed position. Although the device can be adapted to be used with a mortar to thereby pulverize a pill, the device also requires a separate compartment for pulverizing the pill and additional equipment, which can be undesirable.

In yet another example, U.S. Pat. No. 7,252,254 to Engel et al. describes a device that crushes and splits pills. However, like the preceding devices, the Engel device also splits and crushes pills in separate areas of the device.

These and all other extrinsic materials discussed herein are incorporated by reference in their entirety. Where a definition or use of a term in an incorporated reference is inconsistent or contrary to the definition of that term provided herein, the definition of that term provided herein applies and the definition of that term in the reference does not apply.

Unless the context dictates the contrary, all ranges set forth herein should be interpreted as being inclusive of their endpoints, and open-ended ranges should be interpreted to include commercially practical values. Similarly, all lists of values should be considered as inclusive of intermediate values unless the context indicates the contrary.

Thus, there is still a need for simplified devices and methods for crushing and splitting pills in a single area of the device.

## SUMMARY OF THE INVENTION

The inventive subject matter provides apparatus, systems and methods in which a pill could be divided by splitting and/or crushing. In contemplated embodiments, a pill splitter and crusher device can be configured to operate on a pill, such as by splitting or crushing the pill. Preferred devices includes a first member rotatably coupled with a second member. The first member can include a pill-receiving cavity and the second member preferably comprises a blade and an anvil. The blade is generally configured to split a pill placed within the pill-receiving cavity.

The anvil is preferably disposed within the device such that the anvil can crush a pill placed within the pill-receiving cavity when desired. In especially preferred embodiments, the anvil can be coupled to the second member, such that the anvil can be repositioned from a crushing first position and a non-crushing second position with respect to the second member. As alluded to above, in the first position, the anvil can be disposed such that it at least partially surrounds or covers the blade, which allows the pill to be crushed using the anvil or a combination of the anvil and blade. In the second position, the anvil is preferably disposed away from the blade, such that a pill placed within the pill-receiving cavity can be split by the blade.

In another aspect of the inventive subject matter, methods are contemplated for preparing medication for consumption by a human or pet, for example, where a pill dividing device is provided. Preferably, the pill dividing device has a first and second member that are rotatably coupled with respect to one another. The first member can include a pill-receiving cavity and the second member can include an anvil and a cutting member such as a blade, which can be used to operate on the pill.

It is contemplated that a user can be instructed to divide the pill by moving the device to a closed position. To allow for the user to choose between splitting and crushing the pill, the anvil can advantageously be configured to reposition from a crushing first position to a non-crushing second position. It is further contemplated that a plurality of pouches could be provided, each having an inside surface area of no more than two in<sup>2</sup> (12.9 cm<sup>2</sup>) that can receive at least one pill. To reduce potential clean-up of the device, by placing the pill within a pouch prior to dividing the pill, a user could be instructed to insert a pouch that contains one or more pills into the pill dividing device to thereby divide the one or more pills.

Various objects, features, aspects and advantages of the inventive subject matter will become more apparent from the following detailed description of preferred embodiments, along with the accompanying drawing figures in which like numerals represent like components.

### BRIEF DESCRIPTION OF THE DRAWING

FIG. 1A is a perspective view of an embodiment of a pill splitter and crusher in a crushing position.

FIG. 1B is a perspective view of the pill splitter and crusher shown in FIG. 1A in a non-crushing position.

FIG. 2 is a perspective view of an exemplary embodiment of a pill splitter and crusher in a closed position.

FIG. 3 is a perspective view of an exemplary embodiment of a blade for splitting a pill.

FIGS. 4A-4B are front and side perspective views of an exemplary embodiment of an anvil for crushing a pill.

FIG. 5 is a top perspective view of an exemplary pouch.

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FIG. 6 is a perspective view of another embodiment of a pill splitter and crusher having threads configured to receive a screw.

FIG. 7 is a perspective view of one embodiment of a member of a pill splitter and crusher.

FIGS. 8A-8B are a perspective view and a vertical cross-section view, respectively, of an embodiment of an inner lining for a pill splitter and crusher.

FIGS. 9A-9B are a top view and a vertical cross-section view, respectively, of another embodiment of an inner lining for a pill splitter and crusher.

FIG. 10 is a flow chart of an exemplary method of preparing medications using a pill dividing device.

FIG. 11 is a flow chart of an exemplary method of dividing a pill using pouches.

### DETAILED DESCRIPTION

The following discussion provides many example embodiments of the inventive subject matter. Although each embodiment represents a single combination of inventive elements, the inventive subject matter is considered to include all possible combinations of the disclosed elements. Thus if one embodiment comprises elements A, B, and C, and a second embodiment comprises elements B and D, then the inventive subject matter is also considered to include other remaining combinations of A, B, C, or D, even if not explicitly disclosed.

Generally, a pill splitter and crusher device is disclosed, whereby the pill splitter and crusher device can be used to operate on a pill. In FIGS. 1A-1B, an exemplary embodiment of a pill splitter and crusher device **101** is illustrated. In this embodiment, the pill splitter and crusher **101** can include a first member **103** with a pill-receiving cavity **105**, and a second member **107** comprising a blade **109** and an anvil **111**. Typically, the blade **109** and anvil **111** are disposed within the device **101** such that the blade **109** can split a pill within the cavity **105** and the anvil can crush a pill within the cavity **105** by closing the device **101**. As used herein, the term "pill" includes tablets, capsules, and other edible, ingestible, and digestible containers capable of being crushed or split. The pill may include drugs, herbs, supplements or other orally-ingestible compounds. Preferred devices are handheld, such that they can be placed in a palm of a user's hand, and preferably have a length of between 7 cm to 12 cm, a width of between 2 cm to 5 cm, and a height of between 1 cm-3 cm. Of course, the specific dimensions of the device can be varied to larger or smaller dimensions, as necessary, for the specific application.

Preferably, the anvil **111** can be coupled to the second member **107**, such that the anvil **111** can be repositioned from a crushing first position, such as that illustrated in FIG. 1A, to a non-crushing second position, such as that illustrated in FIG. 1B. In the crushing position, the anvil **111** is preferably disposed within the second member **107** such that the anvil **111** at least partially surrounds or covers blade **109** and can crush a pill placed within the pill-receiving cavity **105** of the first member **103** by closing device **101**. In the non-crushing second position, the anvil **111** can advantageously be moved away from the blade **109**, such that blade **109** is exposed and can split a pill placed within the pill-receiving cavity **105** when the device is closed. In addition, a pouch could be used in conjunction with the pill splitter and crusher **101**, such that the pouch could receive a pill to be crushed or split within the pill-receiving cavity **105**.

In some contemplated embodiments, the anvil **111** can comprise of a pattern of raised elements on its face. For instance, the anvil's face could be exposed when the anvil **111**

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is in a crushing first position and covered when the anvil **111** is in the non-crushing second position. Considering the illustrations in FIGS. 1A-1B, the anvil **111** could have a face comprising a plurality of bumps that are exposed when the anvil **111** is in the crushing first position (FIG. 1A) and a flat back surface when in the non-crushing second position (FIG. 1B). It is further contemplated that the anvil **111** could comprise the same material as at least one of the pill-receiving cavity **105**, first member **103**, and the second member **107**. However, it is alternatively contemplated that the anvil **111** could comprise of some other commercially suitable material and/or shape if desired.

As shown in FIG. 1, the anvil **111** can be used to at least partially surround a blade **109** when the anvil is in the crushing position. One manner of partially surrounding the blade **109** is by the use of a slot within the anvil **111**, wherein the slot is sized and dimensioned to receive the blade **109**. Preferably, the anvil **111** height is greater than the blade **109**, such that the anvil **111** can crush the pill when the anvil **111** is in the crushing first position. However, it is contemplated that the height of the blade **109** could be greater than the height of the anvil **111** if it is desired to do so.

The first member **103** and the second member **107** preferably comprise a zinc alloy, but could be composed of anodized aluminum or other metals or metal composites, plastics or other polycarbonates, or any other commercially suitable material(s) or combinations thereof. Although the first and second member **103** and **107** preferably comprise the same shape, it is alternatively contemplated that one or both of the first and second members **103** and **107** could be of different shapes, such as rectangular, circular, and triangular, for example.

In preferred embodiments, the first member **103** can be rotatably coupled to the second member **107**. However, it is alternatively contemplated that the first member **103** could be pivotally or slidably coupled to the second member **107**. The first and second members could be coupled using male and female hinges, which are preferably made of a metal (e.g., aluminum) or metal composite, although any commercially suitable material could be used. When coupled, the pill splitter and crusher **101** can be opened such as that shown in FIG. 1, and closed such as that shown in FIG. 2. With respect to the remaining numerals in FIG. 2, the same considerations for like components with like numerals of FIG. 1B apply.

The pill-receiving cavity **105** is preferably sized and dimensioned to receive one or more pills, such that the one or more pills can be split, crushed, or otherwise divided when the device **101** is moved to a closed position. To help maintain an orientation and facilitate dividing of the one or more pills within the cavity **105**, it is contemplated that the cavity **105** can include a set of protrusions **116** or raised elements. Although the protrusions **116** are shown as a set of parallel raised lines, other patterns of protrusions are contemplated including, for example, a set of intersecting lines or a surface having a higher co-efficient of friction than that of the first member **103**. The first member **103** can further include a second set of protrusions **117** that are sized and dimensioned to maintain the one or more pills within the pill-receiving cavity **105**. Although the second set of protrusions are shown as including two raised elements, it is contemplated that the set could include a single protrusion or three or more protrusions as needed.

It is further contemplated that the pill-receiving cavity **105** could be lined with a material that is different from that of the first member **103** and/or second member **107**. For example, the pill-receiving cavity **105** could comprise an FDA-approved material or some other desired material. Similarly, the

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anvil **111** and blade **109** could be a part of an inner lining of the first member **107**. In such embodiments, the blade **109** and the anvil **111** could be removably and individually coupled to the second member **107** (i.e., the blade and the anvil are replaceable) or the entire inner lining containing the blade **109** and the anvil **111** could be replaced.

In another embodiment, one or both of the pill splitter and crusher **101** can include a magnetic fastener **113** that maintains the pill splitter and crusher **101** while in a closed position. This may be favorable when traveling with the pill splitter and crusher **101**. In such embodiment, it is contemplated that the strength of the magnetic fastener **113** should be sufficient enough to maintain the pill splitter and crusher **101** in a closed position, but not strong enough where opening the pill splitter and crusher **101** requires an excessive amount of force. It is contemplated that other closing mechanisms could be used to maintain the pill splitter and crusher **101** in a closed position, such as a fastener or a clicking or locking mechanism.

In further aspects of the inventive subject matter, the first member **103** could comprise of a funnel region **119**. Having a funnel region **119** allows a user to funnel out the crushed or split remains of the pill from the pill splitter and crusher **101**.

FIG. 3 illustrates an exemplary embodiment of a blade **309** configured to be used in a pill splitter and crusher **101**. Although the blade **309** is shown as rectangular in shape with a straight cutting edge, it is contemplated that the shape of the blade and the cutting surface could vary in geometry depending on the specific application. Furthermore, the blade could be made of a metal (e.g., stainless steel), ceramic, or plastic as long as the material is hard enough to split a pill.

FIGS. 4A-4B illustrate an exemplary embodiment of an anvil **411** for use in a pill cutting and crushing device. As shown in FIGS. 4A-4B, the anvil **411** can have a crushing surface **413** that can be used to crush a pill. The crushing surface **413** could comprise pattern of raised elements or protrusion that facilitate crushing of a pill by the anvil **411**. The raised elements or protrusions could be at a uniform height or at varying height. Moreover, the raised elements or protrusions could comprise of the same geometry or varying geometry. For example, the raised elements or protrusions could comprise of rectangles, cylinders, triangles, or some other shape that would allow crushing of a pill. Finally, the design of the crushing surface **413** could vary with respect to the level of crushing desired, such that finer particles could be achieved using one crushing surface **413** and coarse particles could be achieved using another. Such designs with respect to crush grain quality could be combined within the same anvil **411**.

As discussed earlier, the anvil **411** could be used to at partially surround a blade **409** when the anvil is in the crushing position. In such contemplated embodiments, the anvil **411** can advantageously include a slot **415** configured to receive a blade **409** such as shown in FIG. 4B. Preferably, the anvil **411** has a height greater than that of the blade such that the anvil **411** acts as a blade guard when the blade is not in use. However, it is alternatively contemplated that blade **409** can have a height greater than that of the anvil **411** such as shown in FIG. 4B. In such embodiments, both the anvil **411** and blade **409** can contact a pill. With respect to the remaining numerals in each of FIGS. 4A-4B, the same considerations for like components with like numerals of FIG. 1B apply.

FIG. 5 illustrates one embodiment of a pouch **519** that can be used with a pill crusher and splitter device. Preferably, the pouch can be manufactured a polymer (e.g., a linear low density polyethylene clear bag) and is approved by the U.S. Food and Drug Administration and/or the United States

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Department of Agriculture. The pouch **519** can be configured to receive one or more pills and could be sized and dimensioned to fit within a pill-receiving cavity such as that shown in FIG. 1B. Although shown having a rectangular cross-section, it is alternatively contemplated that the pouch **519** could have any commercially suitable shape. While preferred pouches comprise a single open end **521**, it is contemplated that the pouch could alternatively comprise two flaps that are connected and configured to overlap to allow for easier access to medication within the pouch. With respect to the remaining numerals in FIG. 5, the same considerations for like components with like numerals of FIG. 1B apply.

In FIG. 6, an exemplary embodiment of a pill splitter and crusher device **601** is illustrated, wherein a first member **603** and a second member **607** each comprises a threaded aperture **619** configured to receive a screw **621** or other fastener. By rotating the screw **621** or other fastener, closure of the device **601** and crushing and/or splitting of a pill within the device **601** can be facilitated. With respect to the remaining numerals in FIG. 6, the same considerations for like components with like numerals of FIG. 1B apply.

In FIG. 7, it is contemplated that the first member and the second member of the pill splitter and crusher devices described above could comprise an identical housing **701**, which advantageously reduces manufacturing costs. In such embodiments, the housings of each of the first and second members are preferably configured to receive a removable lining, such as those shown in FIG. 8A or 9A, which thereby allows the functionality of the device to be modified. The removable lining could comprise a pill-receiving cavity or an anvil and blade, for example, and can preferably couple to housing **701** via a snap-fit, although any commercially suitable fastener(s) could be used. In this manner, the lining is easily removable and replaceable as necessary, such as to replace a dull blade or modify the functionality of the device. In further embodiments, the identical components could be coupled to other removable pieces for additional functionality. With respect to the remaining numerals in FIG. 7, the same considerations for like components with like numerals of FIG. 1B apply.

In FIGS. 8A-8B, an inner lining **801** comprising an anvil and blade piece is shown that can be coupled to a first member and/or second member. As illustrated, anvil **811** is removably coupled to the disposable lining **801**, such that the anvil **811** could be individually replaced. It is contemplated that blade **809** can also be individually replaced if needed, for example, when the blade becomes dull. However, in preferred embodiments the blade is integral with the lining **801**, which itself can be removed from the device and replaced as needed. However, one should note that the inner lining **801** can also be replaced by simply removing it from the first and/or second member. With respect to the remaining numerals in FIG. 8A-8B, the same considerations for like components with like numerals of FIG. 1B apply.

Similar to FIGS. 8A-8B, an inner lining **901** comprising a pill-receiving cavity is shown in FIGS. 9A-9B. The lining **901** can also be removably coupled to a first or second member of a pill splitter and crusher device. In such embodiments, a user can replace the pill-receiving cavity as needed, as compared with buying a new pill splitting and crushing device. With respect to the remaining numerals in FIGS. 9A-9B, the same considerations for like components with like numerals of FIG. 1B apply.

In another aspect, a method of preparing medication is illustrated in FIG. 10. A pill dividing device is provided **1001**, wherein the device has a first and second member that are rotatably coupled. Moreover, the first member comprises a

cavity and the second member comprises an anvil and a cutting member. In preferred embodiments, the cavity could receive pills and the cutting member can be a blade. Furthermore, a user is instructed **1003** to divide a pill by moving the device into a closed position. It is contemplated that the anvil is configured to move from a crushing first position to a non-crushing second position.

It should be appreciated that the exemplary embodiment in FIG. **10** could comprise of a further step of dividing the pill by partially crushing **1005** the pill when the device is moved to the closed position while the anvil is disposed in the crushing first position. Moreover, a user could divide the pill by splitting **1007** the pill when the device is moved to the closed position while the anvil is disposed in the crushing first position. In further contemplated methods, an additional step of inserting **1009** a pouch comprising one pill into the cavity of the pill dividing device could be performed.

In another aspect, a method of dividing a pill is shown in FIG. **11**. A plurality of pouches are provided **1101**, wherein the pouches have an inside surface area of no more than 15 cm<sup>2</sup>. Additionally, a user is instructed **1103** to insert at least one of the pouches into a pill dividing device. In contemplated methods, the pill dividing device comprises an anvil that is configured to move from a crushing first position and a non-crushing second position. Typically, the anvil moves between the crushing first position and non-crushing second position with respect to the device. Furthermore, a pill could be crushed **1105** within the pouch when the anvil is in the crushing first position.

In some embodiments, the numbers expressing quantities of ingredients, properties such as concentration, reaction conditions, and so forth, used to describe and claim certain embodiments of the invention are to be understood as being modified in some instances by the term "about." Accordingly, in some embodiments, the numerical parameters set forth in the written description and attached claims are approximations that can vary depending upon the desired properties sought to be obtained by a particular embodiment. In some embodiments, the numerical parameters should be construed in light of the number of reported significant digits and by applying ordinary rounding techniques. Notwithstanding that the numerical ranges and parameters setting forth the broad scope of some embodiments of the invention are approximations, the numerical values set forth in the specific examples are reported as precisely as practicable. The numerical values presented in some embodiments of the invention may contain certain errors necessarily resulting from the standard deviation found in their respective testing measurements.

As used in the description herein and throughout the claims that follow, the meaning of "a," "an," and "the" includes plural reference unless the context clearly dictates otherwise. Also, as used in the description herein, the meaning of "in" includes "in" and "on" unless the context clearly dictates otherwise.

The recitation of ranges of values herein is merely intended to serve as a shorthand method of referring individually to each separate value falling within the range. Unless otherwise indicated herein, each individual value is incorporated into the specification as if it were individually recited herein. All methods described herein can be performed in any suitable order unless otherwise indicated herein or otherwise clearly contradicted by context. The use of any and all examples, or exemplary language (e.g. "such as") provided with respect to certain embodiments herein is intended merely to better illuminate the invention and does not pose a limitation on the scope of the invention otherwise claimed. No language in the

specification should be construed as indicating any non-claimed element essential to the practice of the invention.

Groupings of alternative elements or embodiments of the invention disclosed herein are not to be construed as limitations. Each group member can be referred to and claimed individually or in any combination with other members of the group or other elements found herein. One or more members of a group can be included in, or deleted from, a group for reasons of convenience and/or patentability. When any such inclusion or deletion occurs, the specification is herein deemed to contain the group as modified thus fulfilling the written description of all Markush groups used in the appended claims.

As used herein, and unless the context dictates otherwise, the term "coupled to" is intended to include both direct coupling (in which two elements that are coupled to each other contact each other) and indirect coupling (in which at least one additional element is located between the two elements). Therefore, the terms "coupled to" and "coupled with" are used synonymously.

It should be apparent to those skilled in the art that many more modifications besides those already described are possible without departing from the inventive concepts herein. The inventive subject matter, therefore, is not to be restricted except in the scope of the appended claims. Moreover, in interpreting both the specification and the claims, all terms should be interpreted in the broadest possible manner consistent with the context. In particular, the terms "comprises" and "comprising" should be interpreted as referring to elements, components, or steps in a non-exclusive manner, indicating that the referenced elements, components, or steps may be present, or utilized, or combined with other elements, components, or steps that are not expressly referenced. Where the specification claims refers to at least one of something selected from the group consisting of A, B, C . . . and N, the text should be interpreted as requiring only one element from the group, not A plus N, or B plus N, etc.

What is claimed is:

**1.** A method for crushing a pill, comprising:

providing a plurality of pouches, each of which is configured to receive at least one pill;

instructing a user to insert at least one of the pouches into a cavity of a pill dividing device, wherein the device has an anvil configured to move to a crushing first position from a non-crushing second position with respect to the pill dividing device; and

instructing the user to move the anvil to the crushing first position.

**2.** The method of claim **1**, wherein the pill dividing device comprises first and second members, and further comprising instructing the user to crush the pill within the pouch when the anvil is in the crushing first position by bringing the first and second members together.

**3.** The method of claim **1**, further comprising instructing a user to insert a pill within at least one of the pouches.

**4.** A method for dividing a pill, comprising:

providing a plurality of pouches, each of which (1) has an inside surface area of no more than 13 square centimeters and (2) is configured to receive at least one pill; and

instructing a user to insert at least one of the pouches into a pill dividing device having a protrusion and an anvil configured to move to from a cutting first position where the anvil is disposed away from the protrusion, from a non-cutting second position where the anvil surrounds the protrusion; and

instructing the user to move the anvil to the cutting first position away from the protrusion.

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5. The method of claim 4, wherein the pill dividing device comprises first and second members, and further comprising instructing the user to cut the pill within the pouch when the anvil is in the cutting first position by bringing the first and second members together.

6. The method of claim 4, further comprising instructing a user to insert a pill within at least one of the pouches.

7. A method for preparing medication, comprising:

providing a pill dividing and crushing device having a first member that is rotatably coupled to a second member, wherein the first member comprises a cavity and the second member comprises an anvil;

instructing a user to divide a pill by rotating the second member closer to the first member to move the device to a closed position; and

wherein the anvil is configured to move within the second member from a crushing first position to a non-crushing second position.

8. The method of claim 7, wherein the pill dividing and crushing device further comprises a cutting member.

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9. The method of claim 8, wherein the anvil at least partially surrounds the cutting member in the crushing first position.

10. The method of claim 8, further comprising at least partially crushing the pill by moving the device to the closed position while the anvil is disposed in the crushing first position within the second member.

11. The method of claim 7, further comprising splitting the pill by moving the device to the closed position while the anvil is disposed in the non-crushing second position within the second member.

12. The method of claim 7, further comprising instructing the user to insert a pouch that comprises at least one pill into the cavity of the first member.

13. The device of claim 7, wherein at least one of the first and second members comprises a removable lining.

14. The device of claim 13, wherein the second member comprises the removable lining, and wherein the blade is integral with the removable lining.

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